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Question: I have heard that there is a new important insect pest found in the wine growing regions of northern California. What is it and why is it important?

Answer: The European grapevine moth (EGVM) was found in the Napa Valley of California in October 2009. This was the first occurrence of the moth in the United States. It is a serious pest of grape, feeding on the flowers and bunches. It is found in Southern Europe, North Africa, Anatolia, the Caucasus, and in Chile since 2008. The EGVM larvae, not the adult moths, are responsible for the damage to grapes. Larvae that emerge early in the spring feed on grape bud clusters or flowers and spin webbing around them before pupating inside the web or under a rolled leaf. If heavy flower damage occurs during this first generation, the affected flowers will fail to develop and yield will be reduced. Second-generation larvae enter the grapes to feed before pupating inside the grape. Larvae of the third generation — the most damaging — feed on multiple ripening grapes and expose them to further damage from fungal development and rot. As of March 2010, portions of Napa, Sonoma, and Solano counties were quarantined in response to the infestation.

Question: How might this new pest impact agriculture in the Pajaro Valley?

Answer: It is hard to say, as this is a developing problem. It is impacting agriculture in the quarantined counties. Officials are working with growers, nurseries, landscapers and others who work with plants and fruit to guard against spread of the pest by regulating the harvest, shipping and handling of affected crops and plants. Residents of the quarantined area are asked to review the list of host plants/fruits (below) and to not remove them from their property; the produce may, however, be harvested and consumed on site.

Vineyards in the Pajaro Valley or other California grape growing regions are certainly at significant risk because of the apparent destructive nature on grapes. This pest also feeds on many different plant families (approx. 27) but only a few species within each family are suitable for development. These hosts might be suitable to move or harbor the pest. Much of the knowledge on the importance of other hosts is from research and observation in Europe. For example, in Italy, olive trees adjoining vineyards offer satisfactory food to the larvae and may be a source of infestation by moths. A partial list of known hosts is listed below but little to no information is available in the scientific literature on the damage to these crops.

Scientific Name	Common Name
Actinidia chinensis	Kiwi fruit or Chinese Gooseberry
Berberis vulgaris	European Barberry
Clematis vitalba	Old-Man's-Beard or Traveller's Joy
Daphne gnidium	Spurge Flax
Dianthus spp.	Carnation
Diospyros kaki	Persimmon

Galium mollugo	False Baby's Breath or White Bedstraw
Hypericum calycinum	St. John's Wort or Aaron's Beard
Ligustrum vulgare	European Privet
Olea europaea	Olive
Prunus spp.	Stone Fruit (e.g. apricot, cherry, plum)
Punica granatum	Pomegranate
Rhus glabra	Smooth Sumac
Ribes spp.	Currant, Gooseberry
Rosmarinus officinalis	Rosemary
Rubus spp.	Blackberry, Dewberry
Silene vulgaris	Bladder Campion
Trifolium pratense	Red Clover
Urginea maritime	Sea squill
Vitis spp.	Grape
Ziziphus jujuba	Jujube